

## ABSTRACT OF THE DISCLOSURE

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There is provided a displacement measuring device of which assembled state can be determined optically with ease. There is also provided a light spot position sensor usefully applicable in determination of the assembled state of the displacement measuring device. An optical encoder comprises a scale and a sensor head that is arranged opposite to the scale and can move relative to the scale. The sensor head includes a sensor substrate, on which an index grating and a photosensitive device array are formed. The sensor substrate is also employed to mount a light spot position sensor and a light source for providing a light beam entering the light spot position sensor via the scale to configure a state detection system for detecting an assembled state.